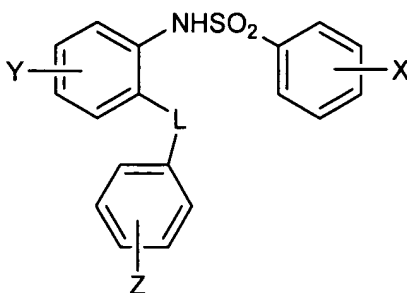


Amendments to the Claims

Please amend the claims as follows (the changes in these claims are shown with ~~striketrough~~ for deleted text and underlines for added text). A complete listing of the claims is listed below with proper claim identifiers. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A modulator of the formula (I) or a salt thereof:



where L is $-\text{C}(\text{O})-$, $-\text{S}-$, $-\text{S}(\text{O})-$ or $-\text{S}(\text{O})_2-$;

X represents from 1 to 4 substituents independently selected from the group consisting of ~~halogen~~, $-\text{CN}$, $-\text{OH}$, $-\text{OR}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CO}_2\text{R}^1$, $-\text{O}(\text{CO})\text{R}^1$, $-\text{C}(\text{O})\text{NR}^1\text{R}^2$, $-\text{OC}(\text{O})\text{NR}^1\text{R}^2$, $-\text{SR}^1$, $-\text{SOR}^1$, $-\text{SO}_2\text{R}^1$, $-\text{SO}_2\text{NR}^1\text{R}^2$, $-\text{NR}^1\text{R}^2$, $-\text{NR}^1\text{C}(\text{O})\text{R}^2$, $-\text{NR}^1\text{C}(\text{O})_2\text{R}^2$, $-\text{NR}^1\text{SO}_2\text{R}^2$, $-\text{NR}^1(\text{CO})\text{NR}^1\text{R}^2$, unsubstituted C_{2-8} alkyl, substituted C_{1-8} alkyl, unsubstituted or substituted C_{2-8} alkenyl, unsubstituted or substituted C_{2-8} alkynyl, unsubstituted or substituted C_{3-8} cycloalkyl, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl;

R^1 , R^2 and R^3 are each independently selected from the group consisting of hydrogen, unsubstituted or substituted C_{1-6} alkyl, unsubstituted or substituted C_{3-6} cycloalkyl, unsubstituted or substituted C_{2-6} alkenyl, unsubstituted or substituted C_{2-6} alkynyl, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, unsubstituted or substituted aryl- C_{1-4} alkyl,

unsubstituted or substituted aryl-C₁₋₄ alkyl, and unsubstituted or substituted aryloxy-C₁₋₄ alkyl; or

two of R¹, R² and R³ together with the atom(s) to which they are attached, may form an unsubstituted or substituted 5-, 6- or 7-membered ring;

Y represents from 1 to 3 substituents, each independently selected from the group consisting of halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴, and unsubstituted or substituted C₁₋₄ alkyl;

R⁴ is selected from the group consisting of hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, and unsubstituted or substituted C₂₋₆ alkynyl;

Z represents 0 to 5 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -OC(O)NR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷C(O)NR⁸R⁹, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted heteroaryl and unsubstituted or substituted heterocyclyl; and

R⁷, R⁸ and R⁹ are each independently hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, unsubstituted or substituted C₂₋₆ alkynyl, unsubstituted or substituted phenyl, unsubstituted or substituted heteroaryl, unsubstituted or substituted aryl-C₁₋₄ alkyl, and unsubstituted or substituted aryloxy-C₁₋₄ alkyl; or where any two of R⁷, R⁸ and R⁹ together with the atom(s) to which they are attached, may form a 5-, 6- or 7-membered ring;

with the proviso that when L is -C(O)-, X is 4-halogen, and Z is hydrogen, Y is other than hydrogen, 4-chloro, or 4-methyl;

with the proviso that the following compounds are excluded from the scope of formula (I):

N-(2-benzoylphenyl)-3,5-bis(trifluoromethyl)-benzenesulfonamide;

N-(4-amino-2-benzoylphenyl)-4-methoxy-benzenesulfonamide;

N-[4-[(2-benzoyl-4-chlorophenyl)amino]sulfonyl]phenyl]-acetamide;
N-(2-benzoyl-4-chlorophenyl)-4-ethyl-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-2,4,6-trimethyl-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-2,4,6-tris(1-methylethyl)-
benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-4-methoxy-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-4-tricyclo[3.3.1.1^{3,7}]dec-1-yl-
benzenesulfonamide;
N-[4-bromo-2-(2-fluorobenzoyl)phenyl]-3,4-dimethoxy-
benzenesulfonamide;
N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-4-(2-propenyloxy)-
benzenesulfonamide;
N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-3,4-dimethoxy-
benzenesulfonamide;
N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-2,5-dimethoxy-
benzenesulfonamide;
2-amino-N-(2-benzoyl-4-methylphenyl)-benzenesulfonamide;
N-(2-benzoyl-5-methylphenyl)-N,4-dimethyl-benzenesulfonamide; and
2-amino-2'-benzoyl-4'-chloro-benzenesulfonanilide.

2. (Original) The modulator of claim 1, where L is -CO-.

3. (Currently Amended) The modulator of claim 2, where X represents from 1 to 3 substituents independently selected from the group consisting of halogen, -CN, -OH, -OR¹, -C(O)R¹, -CO₂R¹, -O(CO)R¹, -OC(O)NR¹R², -SR¹, -SOR¹, -SO₂R¹, -NR¹R², -NR¹C(O)R², -NR¹C(O)₂R², -NR¹(CO)NR¹R², unsubstituted C₂₋₈ alkyl, substituted C₁₋₈ alkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- or 6-membered heteroaryl, or unsubstituted or substituted 3- to 7-membered heterocyclyl.

4. (Original) The modulator of claim 2, where at least one X substituent is situated *para* to the sulfonamido bond as defined in formula (I).
5. (Original) The modulator of claim 2, where at least one X substituent is situated *meta* to the sulfonamido bond as defined in formula (I).
6. (Original) The modulator of claim 2, where at least one X substituent is situated *ortho* to the sulfonamido bond as defined in formula (I).
7. (Original) The modulator of claim 2, where at least one X is unsubstituted C₂₋₈ alkyl, unsubstituted C₃₋₈ cycloalkyl, unsubstituted C₂₋₈ alkenyl, or unsubstituted C₂₋₈ alkynyl.
8. (Original) The modulator of claim 2, where at least one X is substituted C₁₋₈ alkyl, substituted C₃₋₈ cycloalkyl, substituted C₂₋₈ alkenyl, or substituted C₂₋₈ alkynyl, each having from 1 to 5 substituents independently selected from the group consisting of halogen, -OH, -CN, -NO₂, -O, -OC(O)R¹, -OR¹, -C(O)R¹, -CONR¹R², -OC(O)NR¹R², -NR²C(O)R¹, -NR¹C(O)NR²R³, -CO₂R¹, -NR¹R², -NR²CO₂R¹, -SR¹, -SOR¹, -SO₂R¹, -SO₂NR¹R², -NR¹SO₂R², unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl.
9. (Original) The modulator of claim 8, where at least one X is substituted C₁₋₈ alkyl, having from 1 to 3 substituents independently selected from the group consisting of halogen, -OH, -CN, =O, -OC(O)R¹, -OR¹, -C(O)R¹, -CONR¹R², -NR²C(O)R¹, -CO₂R¹, -NR¹R², -SO₂R¹, unsubstituted or substituted phenyl, and unsubstituted or substituted 5- or 6-membered heteroaryl.
10. (Original) The modulator of claim 2, where at least one X is unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, or unsubstituted or substituted 3- to 10-membered heterocyclyl, where when X is substituted is has from 1 to 4 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₈ alkyl, -CN, -NO₂, -OH, -OR¹, =O,

$-\text{OC}(\text{O})\text{R}^1$, $-\text{CO}_2\text{R}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CONR}^1\text{R}^2$, $-\text{OC}(\text{O})\text{NR}^1\text{R}^2$, $-\text{NR}^2\text{C}(\text{O})\text{R}^1$, $-\text{NR}^1\text{C}(\text{O})\text{NR}^2\text{R}^3$, $-\text{NR}^1\text{R}^2$, $-\text{NR}^2\text{CO}_2\text{R}^1$, $-\text{SR}^1$, $-\text{SOR}^1$, $-\text{SO}_2\text{R}^1$, $-\text{SO}_2\text{NR}^1\text{R}^2$, and $-\text{NR}^1\text{SO}_2\text{R}^2$.

11. (Original) The modulator of claim 10, where at least one X is unsubstituted or substituted phenyl, where when X is substituted it has from 1 to 3 substituents independently selected from the group consisting of halogen, $-\text{OH}$, $-\text{OR}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CONR}^1\text{R}^2$, $-\text{NR}^2\text{C}(\text{O})\text{R}^1$, $-\text{NR}^1\text{R}^2$, $-\text{SO}_2\text{R}^1$, and unsubstituted or substituted C_{1-8} alkyl.

12. (Original) The modulator of claim 10, where at least one X is unsubstituted or substituted 3- to 7-membered heterocyclyl, where when X is substituted it has from 1 to 3 substituents independently selected from the group consisting of C_{1-8} alkyl, $-\text{OR}^1$, $-\text{OH}$, $-\text{OC}(\text{O})\text{R}^1$, $-\text{CO}_2\text{R}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CONR}^1\text{R}^2$, $-\text{NR}^1\text{R}^2$, $-\text{SO}_2\text{R}^1$, and $-\text{NR}^1\text{SO}_2\text{R}^2$.

13. (Currently Amended) The modulator of claim 10, where at least one X is unsubstituted or substituted 5- or 6-membered heteroaryl, where when X is substituted it has from 1 to 3 substituents independently selected from the group consisting of halogen, $-\text{OH}$, $-\text{OR}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CONR}^1\text{R}^2$, $-\text{NR}^2\text{C}(\text{O})\text{R}^1$, $-\text{NR}^1\text{R}^2$, $-\text{SO}_2\text{R}^1$, and unsubstituted or substituted C_{1-8} alkyl.

14. (Original) The modulator of claim 2, where R^1 , R^2 and R^3 , when substituted, can have from 1 to 3 substituents independently selected from the group consisting of halogen, $-\text{OH}$, $-\text{OR}'$, $-\text{OCOHNR}'$, $-\text{OCONR}'_2$, $-\text{SH}$, $-\text{SR}'$, $-\text{SO}_2\text{NH}_2$, $-\text{CONH}_2$, $-\text{NHC}(\text{O})\text{NH}_2$, $\text{NR}'\text{C}(\text{O})\text{NH}_2$, $-\text{CO}_2\text{H}$, $-\text{CN}$, $-\text{NO}_2$, $-\text{NH}_2$, $-\text{NHR}'$ and $-\text{NR}'_2$, $-\text{S}(\text{O})\text{R}'$, $-\text{S}(\text{O})_2\text{R}'$, $-\text{CO}_2\text{R}'$, $-\text{CONR}'_2$, $-\text{CONHR}'$, $-\text{C}(\text{O})\text{R}'$, $-\text{NR}'\text{COR}'$, $-\text{NHCOR}'$, $-\text{NR}'\text{CO}_2\text{R}'$, $-\text{NHCO}_2\text{R}'$, $-\text{CO}_2\text{R}'$, $-\text{NR}'\text{C}(\text{O})\text{NR}'_2$, $-\text{NHC}(\text{O})\text{NR}'_2$, $-\text{NR}'\text{C}(\text{O})\text{NHR}'$, $-\text{NHC}(\text{O})\text{NHR}'$, $-\text{NR}'\text{SO}_2\text{R}'$, $-\text{NH}\text{SO}_2\text{R}'$, $-\text{SO}_2\text{NR}'_2$, and $-\text{SO}_2\text{NHR}'$, where R' is C_{1-6} alkyl.

15. (Original) The modulator of claim 2, where Y represents from 1 to 3 substituents independently selected from the group consisting of halogen, $-\text{CN}$, $-\text{OR}^4$, $-\text{C}(\text{O})\text{R}^4$, $-\text{SR}^4$, $-\text{CF}_3$, $-\text{SOR}^4$, and $-\text{SO}_2\text{R}^4$.

16. (Original) The modulator of claim 15, where Y represents from 1 to 3 substituents independently selected from the group consisting of halogen, -CN, -CF₃, and -SO₂R⁴.

17. (Original) The modulator of claim 15, where at least one Y represents halogen.

18. (Original) The modulator of claim 2, where Y represents from 1 to 2 substituents, each independently selected from the group consisting of halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴, and unsubstituted or substituted C₁₋₄ alkyl.

19. (Original) The modulator of claim 18, where one Y represents a halogen and another substituent selected from the group consisting of halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴ and unsubstituted or substituted C₁₋₄ alkyl.

20. (Original) The modulator of claim 18, where at least one Y substituent is located *para* to the sulfonamide bond as defined in formula (I) and another Y substituent is halogen.

21. (Original) The modulator of claim 15, where at least one Y is unsubstituted C₁₋₄ alkyl.

22. (Original) The modulator of claim 15, where at least one Y is substituted C₁₋₄ alkyl, having from 1 to 3 substituents independently selected from the group consisting of halogen, -OH, -OR⁴, -CN, -NO₂, =O, -OC(O)R⁴, -CO₂R⁴, -C(O)R⁴, -CONR⁴R⁵, -OC(O)NR⁴R⁵, -NR⁴C(O)R⁵, -NR⁴C(O)NR⁵R⁶, -NR⁴R⁵, -NR⁴CO₂R⁵, -SR⁴, -SOR⁴, -SO₂R⁴, -SO₂NR⁴R⁵, and -NR⁴SO₂R⁵,

where R⁴, R⁵ and R⁶ are each independently selected from the group consisting of hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₁₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, and unsubstituted or substituted C₂₋₆ alkynyl; or where any two of R⁴, R⁵ and R⁶ together with the atom(s) to which they are attached, may form a 5-, 6- or 7-membered ring.

23. (Original) The modulator of claim 22, where at least one Y is substituted C₁₋₄ alkyl, having from 1 to 3 substituents independently selected from the group consisting of halogen, -OH, -OR⁴, -CN, -NO₂, =O, -OC(O)R⁴, -CO₂R⁴, -C(O)R⁴, -CONR⁴R⁵, -NR⁴C(O)R⁵, -NR⁴R⁵, -NR⁴, -SR⁴, -SOR⁴, -SO₂R⁴, and -NR⁴SO₂R⁵.

24. (Original) The modulator of claim 23, where R⁴, R⁵ and R⁶, when substituted, can have from with from 1 to 3 substituents independently selected from the group consisting of halogen, -OH, -OR', -SH, -SR', -SO₂NH₂, -CONH₂, -NHC(O)NH₂, N(C₁₋₆alkyl)C(O)NH₂, -CO₂H, -CN, -NO₂, -NH₂, -NHR', -NR'₂, -S(O)R', -S(O)₂R', -CO₂R', -CONHR', -CONR'₂, and -C(O)R', where R' is C₁₋₆alkyl.

25. (Original) The modulator of claim 2, where Z represents 0 to 3 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted phenyl, unsubstituted or substituted 5- or 6-membered heteroaryl, and unsubstituted or substituted 3- to 7-membered heterocyclyl.

26. (Original) The modulator of claim 2, where Z represents 0 to 2 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₁₋₆ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -C(O)R⁷, -CONR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted phenyl, unsubstituted or substituted 3 to 7-membered heterocyclyl, and unsubstituted or substituted 5-or 6-membered heteroaryl.

27. (Previously Presented) The modulator of claim 25, where at least one Z is unsubstituted C₁₋₈ alkyl, unsubstituted C₃₋₈ cycloalkyl, unsubstituted C₂₋₈ alkenyl, unsubstituted C₂₋₈ alkynyl or unsubstituted C₁₋₈ alkoxy, unsubstituted 6- to 10-membered aryl, unsubstituted 3- to 7-membered heterocyclyl, and 3- to 7-membered heteroaryl.

28. (Previously Presented) The modulator of claim 25, where at least one Z is substituted C₁₋₈ alkyl, substituted C₃₋₈ cycloalkyl, substituted C₂₋₈ alkenyl, substituted C₂₋₈ alkynyl or substituted C₁₋₈ alkoxy, each having from 1 to 5 substituents independently selected from the group consisting of halogen, -OH, -OR⁷, -CN, -NO₂, =O, -CN, -NO₂, -OC(O)R⁷, -CO₂R⁷, -C(O)₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -OC(O)NR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷C(O)NR⁸R⁹, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted phenyl, unsubstituted or substituted 5- or 6-membered heteroaryl, or unsubstituted or substituted 3- to 6-membered heterocyclyl.

29. (Previously Presented) The modulator of claim 25, where each R⁷, R⁸ and R⁹, when substituted, can have from 1 to 3 substituents independently selected from the group consisting of halogen, -OH, -OR', -OCONHR', -OCONR'₂, -SH, -SR', -CN, -SO₂NH₂, -CONH₂, -NHC(O)NH₂, -NR'C(O)NH₂, -CO₂H, -NO₂, -NH₂, -NHR', -NR'₂, -S(O)R', -S(O)₂R', -CO₂R', -CONR'₂, -CONHR', -C(O)R', -NR'COR', -NHCOR', -NR'CO₂R', -NHCO₂R', -CO₂R', -NR'C(O)NR'₂, -NHC(O)NR'₂, -NR'C(O)NHR', -NHC(O)NHR', -NR'SO₂R', -NHSO₂R', -SO₂NR'₂, and -SO₂NHR', where R' is C₁₋₆alkyl.

30. (Original) The modulator of claim 3, where Y represents from 1 to 3 substituents, each independently selected from the group consisting of halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴, and unsubstituted or substituted C₁₋₄ alkyl.

31. (Original) The modulator of claim 30, where at least one Y is halogen.

32. (Original) The modulator of claim 25, where Y represents from 1 to 3 substituents, each independently selected from the group consisting of halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴, and unsubstituted or substituted C₁₋₄ alkyl.

33. (Original) The modulator of claim 32, where at least one Y is halogen.

34. (Original) The modulator of claim 15, where Z represents 0 to 3 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or

substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted phenyl, unsubstituted or substituted 5- or 6-membered heteroaryl, and unsubstituted or substituted 3- to 7-membered heterocyclyl.

35. (Original) The modulator of claim 34, where X is unsubstituted C₂₋₈ alkyl or substituted C₁₋₈ alkyl.

36. (Original) The modulator of claim 34, where at least one Y is halogen.

37. (Original) The modulator of claim 30, where Z represents 0 to 3 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted phenyl, unsubstituted or substituted 5- or 6-membered heteroaryl, and unsubstituted or substituted 3- to 7-membered heterocyclyl.

38. (Original) The modulator of claim 37, where X is unsubstituted C₂₋₈ alkyl or substituted C₁₋₈ alkyl.

39. (Original) The modulator of claim 37, where at least one Y is halogen.

40. (Original) The modulator of claim 1, which has activity in a chemotaxis assay of <10000 nM.

41. (Original) The modulator of claim 1, which has activity in a chemotaxis assay of <1000 nM.

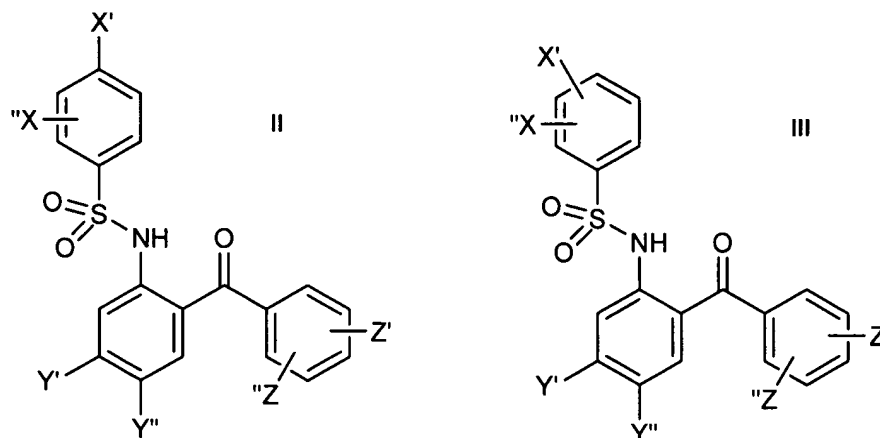
42. (Original) The modulator of claim 1, which has activity in a chemotaxis assay of <100 nM.

43. (Original) The modulator of claim 1, which has activity in a CCR9 chemotaxis assay of <10000 n M.

44. (Original) The modulator of claim 1, which has activity in a CCR9 chemotaxis assay of <1000 nM.

45. (Original) The modulator of claim 1, which has activity in a CCR9 chemotaxis assay of <100 n M.

46. (Currently Amended) A modulator of one of the formulae (II) or (III) or a salt thereof:



where X' and X'' are each independently selected from the group consisting of hydrogen, halogen, ~~halogen~~, ~~CN~~, -OH, -OR¹, -C(O)R¹, -CO₂R¹, -O(CO)R¹, -C(O)NR¹R², -OC(O)NR¹R², -SR¹, -SOR¹, -SO₂R¹, -SO₂NR¹R², -NR¹R², -NR¹C(O)R², -NR¹C(O)₂R², -NR¹SO₂R², -NR¹(CO)NR²R³, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl, with the proviso that if one of X' and X'' is hydrogen than the other is not hydrogen or unsubstituted methyl;

R^1 , R^2 and R^3 are each independently selected from the group consisting of hydrogen, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, 6- to 10-membered aryl, 5- to 10-membered heteroaryl, aryl-C₁₋₄ alkyl, aryl-C₁₋₄ alkyl, and aryloxy-C₁₋₄ alkyl; or

two of R¹, R² and R³ together with the atom(s) to which they are attached, may form a 5-, 6- or 7- membered ring;

Y' and Y'' are each independently selected from the group consisting of hydrogen, halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴ and unsubstituted or substituted C₁₋₄ alkyl, with the proviso that Y' and Y'' cannot both be hydrogen simultaneously;

R⁴ is selected from the group consisting of hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, and unsubstituted or substituted C₂₋₆ alkynyl;

Z' and Z'' are each independently selected from the group consisting of hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -OC(O)NR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷C(O)NR⁸R⁹, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- or 6-membered heteroaryl and unsubstituted or substituted 3- to 7-membered heterocyclyl; and

where R⁷, R⁸ and R⁹ are each independently hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, unsubstituted or substituted C₂₋₆ alkynyl, unsubstituted or substituted phenyl, unsubstituted or substituted heteroaryl, unsubstituted or substituted aryl-C₁₋₄ alkyl, and unsubstituted or substituted aryloxy-C₁₋₄ alkyl; or where any two of R⁷, R⁸ and R⁹ together with the atom(s) to which they are attached, may form a 5-, 6- or 7- membered ring;

with the proviso that the following compounds are excluded from the scope of formulae (II) and (III):

N-(2-benzoylphenyl)-3,5-bis(trifluoromethyl)-benzenesulfonamide;

N-(4-amino-2-benzoylphenyl)-4-methoxy-benzenesulfonamide;

N-[4-[(2-benzoyl-4-chlorophenyl)amino]sulfonyl]phenyl]-acetamide;

N-(2-benzoyl-4-chlorophenyl)-4-ethyl-benzenesulfonamide;

N-(2-benzoyl-4-chlorophenyl)-2,4,6-trimethyl-benzenesulfonamide;

N-(2-benzoyl-4-chlorophenyl)-2,4,6-tris(1-methylethyl)-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-4-methoxy-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-4-tricyclo[3.3.1.1^{3,7}]dec-1-yl-benzenesulfonamide;
N-[4-bromo-2-(2-fluorobenzoyl)phenyl]-3,4-dimethoxy-benzenesulfonamide;
N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-4-(2-propenyloxy)-benzenesulfonamide;
N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-3,4-dimethoxy-benzenesulfonamide;
N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-2,5-dimethoxy-benzenesulfonamide;
2-amino-N-(2-benzoyl-4-methylphenyl)-benzenesulfonamide;
N-(2-benzoyl-5-methylphenyl)-N,4-dimethyl-benzenesulfonamide;
and
2-amino-2'-benzoyl-4'-chloro-benzenesulfonanilide.

47. (Currently Amended) The modulator of claim 46, where X' and X'' are each independently selected from the group consisting of hydrogen, ~~halogen~~, ~~CN~~, ~~-OR¹~~, ~~-C(O)R¹~~, ~~-SO₂R¹~~, ~~-NR¹R²~~, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted phenyl, unsubstituted or substituted 5- or 6-membered heteroaryl, unsubstituted or substituted 5- or 6-membered heterocyclyl, with the proviso that if one of X' and X'' is hydrogen then the other is not hydrogen or unsubstituted methyl.

48. (Currently Amended) The modulator of claim; 46, where X' and X'' are each independently selected from the group consisting of hydrogen, ~~halogen~~, ~~CN~~, ~~-CF₃~~, ~~-CH=CH₂~~, isoamyl, phenylacetylene, t-butyl, ethyl (Et), i-propyl (ⁱPr), ~~-C(CH₃)CH₂CH₃~~, hydroxybutyl, ~~-C(CH₃)₂CH₂CH₂OH~~, ~~-CH₂CH₂CO₂Me~~, ~~-OCF₃~~, ~~-OMe~~, ~~-O-ⁱPr~~, ~~-C(O)Me~~, ~~-SO₂Me~~, phenyl (Ph), ~~-OEt~~, pyrazole, thiophene, aminopyridine,

oxazole, and morpholinyl, with the proviso that X' and X'' cannot both be hydrogen simultaneously.

49. (Original) The modulator of claim 46, where Y' and Y'' are each independently hydrogen or halogen, with the proviso that one or both are halogen.

50. (Original) The modulator of claim 46, where Y' is hydrogen and Y'' is chloro or bromo.

51. (Canceled).

52. (Currently Amended) The modulator of claim 46, where at least one of Y' or Y'' is a halogen atom and is *meta* to the sulfonamide bond in formulae ~~(I)~~ (II) or (III).

53. (Currently Amended) The modulator of claim 46, where at least one of Y' or Y'' is a halogen atom and is *para* to the sulfonamide bond in formula ~~e (I)~~ (II) or (III).

54. (Original) The modulator of claim 46, where Z' and Z'' are each independently selected from the group consisting of hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, -CN, -OH, -OR⁷, -C(O)R⁷, -CO₂R⁷, -OC(O)R⁷, -CONR⁷R⁸, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -NR⁷SO₂R⁸, -SO₂NR⁷R⁸, unsubstituted or substituted phenyl, and unsubstituted or substituted 5- or 6-membered heteroaryl, unsubstituted or substituted 3- to 7-membered heterocycl.

55. (Original) The modulator of claim 46, where Z' and Z'' are each independently hydrogen, halogen, -CN, -OR⁷, -NR⁷R⁸, -SR⁷, -SOR⁷, and -SO₂R⁷, unsubstituted or substituted C₁₋₆ alkoxy, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted phenyl, or unsubstituted or substituted 5- or 6-membered heterocycl.

56. (Original) The modulator of claim 47, where Y' and Y'' are each independently hydrogen or halogen, with the proviso that one or both are halogen.

57. (Original) The modulator of claim 47, where Z' and Z'' are each independently selected from the group consisting of hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, -CN, -OH, -OR⁷, -C(O)R⁷, -CO₂R⁷, -OC(O)R⁷, -CONR⁷R⁸, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -NR⁷SO₂R⁸, -SO₂NR⁷R⁸, unsubstituted or substituted phenyl, and unsubstituted or substituted 5- or 6-membered heteroaryl, unsubstituted or substituted 3- to 7-membered heterocycl.

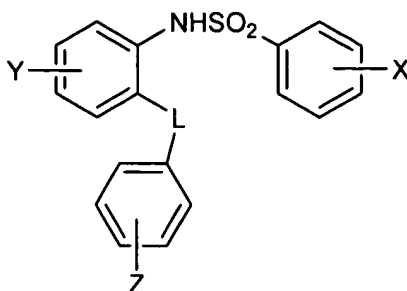
58. (Original) The modulator of claim 49, where Z' and Z'' are each independently selected from the group consisting of hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₁₋₈ cycloalkyl, -CN, -OH, -OR⁷, -C(O)R⁷, -CO₂R⁷, -OC(O)R⁷, -CONR⁷R⁸, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -NR⁷SO₂R⁸, unsubstituted or substituted 6- to 10-membered aryl, and unsubstituted or substituted 5- or 6-membered heteroaryl, unsubstituted or substituted 3- to 7-membered heterocycl.

59. (Original) The modulator of claim 56, where Z' and Z'' are each independently selected from the group consisting of hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, -CN, -OH, -OR⁷, -C(O)R⁷, -CO₂R⁷, -OC(O)R⁷, -CONR⁷R⁸, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -NR⁷SO₂R⁸, -SO₂NR⁷R⁸, unsubstituted or substituted phenyl, and unsubstituted or substituted 5- or 6-membered heteroaryl, unsubstituted or substituted 3- to 7-membered heterocycl.

60. (Original) A composition comprising a pharmaceutically acceptable carrier and a compound of claim 2.

61-67. (Canceled)

68. (New) A modulator of the formula (I) or a salt thereof:



where L is $-\text{C}(\text{O})-$, $-\text{S}-$, $-\text{S}(\text{O})-$ or $-\text{S}(\text{O})_2-$;

X represents from 1 to 5 substituents independently selected from the group consisting of unsubstituted C_{2-8} alkyl, unsubstituted C_{3-8} cycloalkyl, unsubstituted C_{2-8} alkenyl, unsubstituted C_{2-8} alkynyl, unsubstituted 6- to 10-membered aryl, unsubstituted 5- to 10-membered heteroaryl, unsubstituted 3- to 10-membered heterocyclyl, unsubstituted 5- to 6-membered heteroaryl, unsubstituted phenyl, unsubstituted 3- to 7-membered heterocyclyl;

substituted C_{1-8} alkyl, substituted C_{3-8} cycloalkyl, substituted C_{2-8} alkenyl, substituted C_{2-8} alkynyl, substituted 6- to 10-membered aryl, substituted 5- to 10-membered heteroaryl, substituted 3- to 10-membered heterocyclyl, substituted phenyl, substituted 5- to 6-membered heteroaryl, substituted 3- to 7-membered heterocyclyl;

wherein when at least one X is substituted C_{1-8} alkyl, substituted C_{3-8} cycloalkyl, substituted C_{2-8} alkenyl, or substituted C_{2-8} alkynyl, X has from 1 to 5 substituents independently selected from the group consisting of halogen, $-\text{OH}$, $-\text{CN}$, $-\text{NO}_2$, $=\text{O}$, $-\text{OC}(\text{O})\text{R}^1$, $-\text{OR}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CONR}^1\text{R}^2$, $-\text{OC}(\text{O})\text{NR}^1\text{R}^2$, $-\text{NR}^2\text{C}(\text{O})\text{R}^1$, $-\text{NR}^1\text{C}(\text{O})\text{NR}^2\text{R}^3$, $-\text{CO}_2\text{R}^1$, $-\text{NR}^1\text{R}^2$, $-\text{NR}^2\text{CO}_2\text{R}^1$, $-\text{SR}^1$, $-\text{SOR}^1$, $-\text{SO}_2\text{R}^1$, $-\text{SO}_2\text{NR}^1\text{R}^2$, $-\text{NR}^1\text{SO}_2\text{R}^2$;

wherein when at least one X is substituted 6- to 10-membered aryl, substituted 5- to 10-membered heteroaryl, or substituted 3- to 10-membered heterocyclyl, X has from 1 to 4 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C_{1-8} alkyl, $-\text{CN}$, $-\text{NO}_2$, $-\text{OH}$, $-\text{OR}^1$, $=\text{O}$, $-\text{OC}(\text{O})\text{R}^1$, $-\text{CO}_2\text{R}^1$, $-\text{C}(\text{O})\text{R}^1$, $-\text{CONR}^1\text{R}^2$, $-\text{OC}(\text{O})\text{NR}^1\text{R}^2$, $-\text{NR}^2\text{C}(\text{O})\text{R}^1$, $-\text{NR}^1\text{C}(\text{O})\text{NR}^2\text{R}^3$, $-\text{NR}^1\text{R}^2$, $-\text{NR}^2\text{CO}_2\text{R}^1$, $-\text{SR}^1$, $-\text{SOR}^1$, $-\text{SO}_2\text{R}^1$, $-\text{SO}_2\text{NR}^1\text{R}^2$, and $-\text{NR}^1\text{SO}_2\text{R}^2$;

wherein when at least one X is substituted phenyl, X has from 1 to 3 substituents independently selected from the group consisting of halogen, -OH, -OR¹, -C(O)R¹, -CONR¹R², -NR²C(O)R¹, -NR¹R², -SO₂R¹, and unsubstituted C₁₋₈ alkyl;

wherein when at least one X is substituted 5- to 6-membered heteroaryl, X has from 1 to 3 substituents independently selected from the group consisting of halogen, -OR¹, -C(O)R¹, -CONR¹R², -NR²C(O)R¹, -NR¹R², -SO₂R¹, and unsubstituted C₁₋₈ alkyl;

wherein when at least one X is substituted 3- to 7-membered heterocyclyl, X has from 1 to 3 substituents independently selected from the group consisting of C₁₋₈ alkyl, -OR¹, -OH, -OC(O)R¹, -CO₂R¹, -C(O)R¹, -CONR¹R², -NR¹R², -SO₂R¹, and -NR¹SO₂R²;

R¹, R² and R³ are each independently selected from the group consisting of hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, unsubstituted or substituted C₂₋₆ alkynyl, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, unsubstituted or substituted aryl-C₁₋₄ alkyl, unsubstituted or substituted aryl-C₁₋₄ alkyl, and unsubstituted or substituted aryloxy-C₁₋₄ alkyl; or

two of R¹, R² and R³ together with the atom(s) to which they are attached, may form an unsubstituted or substituted 5-, 6- or 7-membered ring;

Y represents from 1 to 3 substituents, each independently selected from the group consisting of halogen, -CN, -OH, -OR⁴, -C(O)R⁴, -CO₂R⁴, -SR⁴, -SOR⁴, -SO₂R⁴, and unsubstituted or substituted C₁₋₄ alkyl;

R⁴ is selected from the group consisting of hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, and unsubstituted or substituted C₂₋₆ alkynyl;

Z represents 0 to 5 substituents independently selected from the group consisting of halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -OC(O)NR⁷R⁸, -NR⁷C(O)R⁸,

$-\text{NR}^7\text{C}(\text{O})\text{NR}^8\text{R}^9$, $-\text{NR}^7\text{R}^8$, $-\text{NR}^7\text{CO}_2\text{R}^8$, $-\text{SR}^7$, $-\text{SOR}^7$, $-\text{SO}_2\text{R}^7$, $-\text{SO}_2\text{NR}^7\text{R}^8$, $-\text{NR}^7\text{SO}_2\text{R}^8$, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted heteroaryl and unsubstituted or substituted heterocyclyl; and

R^7 , R^8 and R^9 are each independently hydrogen, unsubstituted or substituted C_{1-6} alkyl, unsubstituted or substituted C_{3-6} cycloalkyl, unsubstituted or substituted C_{2-6} alkenyl, unsubstituted or substituted C_{2-6} alkynyl, unsubstituted or substituted phenyl, unsubstituted or substituted heteroaryl, unsubstituted or substituted aryl- C_{1-4} alkyl, and unsubstituted or substituted aryloxy- C_{1-4} alkyl; or where any two of R^7 , R^8 and R^9 together with the atom(s) to which they are attached, may form a 5-, 6- or 7-membered ring;

wherein when Z is 1 to 5 substituents, at least one Z is substituted or unsubstituted C_{1-8} alkyl, substituted or unsubstituted C_{3-8} cycloalkyl, substituted or unsubstituted C_{2-8} alkenyl, substituted or unsubstituted C_{2-8} alkynyl, substituted or unsubstituted C_{1-8} alkoxy, unsubstituted 6- to 10-membered aryl, unsubstituted 3- to 7-membered heterocyclyl, and 3- to 7-membered heteroaryl each substituted group having from 1 to 5 substituents independently selected from the group consisting of halogen, $-\text{OH}$, $-\text{OR}^7$, $-\text{CN}$, $-\text{NO}_2$, $=\text{O}$, $-\text{CN}$, $-\text{NO}_2$, $-\text{OC}(\text{O})\text{R}^7$, $-\text{CO}_2\text{R}^7$, $-\text{C}(\text{O})_2\text{R}^7$, $-\text{C}(\text{O})\text{R}^7$, $-\text{CONR}^7\text{R}^8$, $-\text{OC}(\text{O})\text{NR}^7\text{R}^8$, $-\text{NR}^7\text{C}(\text{O})\text{R}^8$, $-\text{NR}^7\text{C}(\text{O})\text{NR}^8\text{R}^9$, $-\text{NR}^7\text{R}^8$, $[-]\text{NR}^7\text{CO}_2\text{R}^8$, $-\text{SR}^7$, $-\text{SOR}^7$, $-\text{SO}_2\text{R}^7$, $-\text{SO}_2\text{NR}^7\text{R}^8$, $-\text{NR}^7\text{SO}_2\text{R}^8$, unsubstituted or substituted phenyl, unsubstituted or substituted 5- or 6- membered heteroaryl, or unsubstituted or substituted 3- to 6-membered heterocyclyl; and

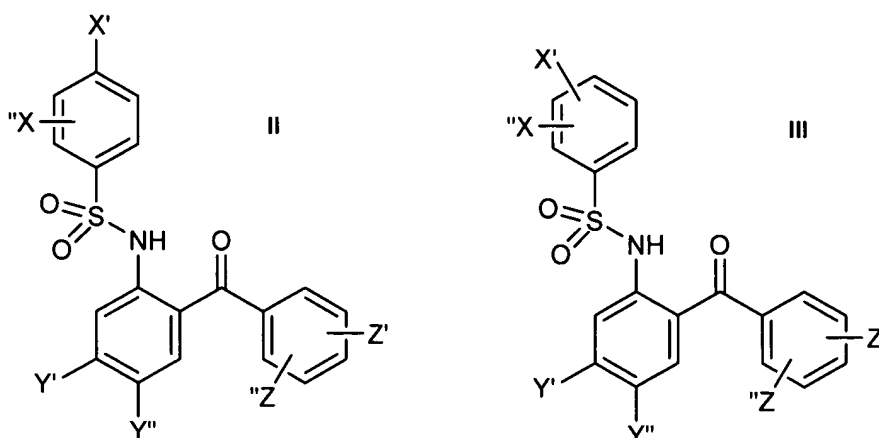
with the proviso that the following compounds are excluded from the scope of formula (I):

N-(2-benzoylphenyl)-3,5-bis(trifluoromethyl)-benzenesulfonamide;
N-(4-amino-2-benzoylphenyl)-4-methoxy-benzenesulfonamide;
N-[4-[(2-benzoyl-4-chlorophenyl)amino]sulfonyl]phenyl]-acetamide;
N-(2-benzoyl-4-chlorophenyl)-4-ethyl-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-2,4,6-trimethyl-benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-2,4,6-tris(1-methylethyl)-
benzenesulfonamide;
N-(2-benzoyl-4-chlorophenyl)-4-methoxy-benzenesulfonamide;

N-(2-benzoyl-4-chlorophenyl)-4-tricyclo[3.3.1.1^{3,7}]dec-1-yl-
 benzenesulfonamide;
 N-[4-bromo-2-(2-fluorobenzoyl)phenyl]-3,4-dimethoxy-
 benzenesulfonamide;
 N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-4-(2-propenyloxy)-
 benzenesulfonamide;
 N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-3,4-dimethoxy-
 benzenesulfonamide;
 N-[4-chloro-2-(2-chlorobenzoyl)phenyl]-2,5-dimethoxy-
 benzenesulfonamide;
 2-amino-N-(2-benzoyl-4-methylphenyl)-benzenesulfonamide;
 N-(2-benzoyl-5-methylphenyl)-N,4-dimethyl-benzenesulfonamide;
 and
 2-amino-2'-benzoyl-4'-chloro-benzenesulfonanilide.

69. (New) The modulator of claim 68, where at least one X is *para* to the sulfonamide bond in formula (I).

70. (New) A modulator of one of the formulae (II) or (III) or a salt thereof:



where X' and X'' are each independently selected from the group consisting of hydrogen, -OH, -OR¹, -C(O)R¹, -CO₂R¹, -O(CO)R¹, -C(O)NR¹R², -OC(O)NR¹R², -SR¹, -SOR¹, -SO₂R¹, -SO₂NR¹R², -NR¹R², -NR¹C(O)R², -NR¹C(O)₂R², -NR¹SO₂R², -NR¹(CO)NR²R³, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or

substituted C₃₋₈ cycloalkyl, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl, with the proviso that if one of X' and X'' is hydrogen than the other is not hydrogen or unsubstituted methyl;

R¹, R₂ and R³ are each independently selected from the group consisting of hydrogen, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, 6- to 10-membered aryl, 5- to 10-membered heteroaryl, aryl-C₁₋₄ alkyl, aryl-C₁₋₄ alkyl, and aryloxy-C₁₋₄ alkyl; or

two of R¹, R² and R³ together with the atom(s) to which they are attached, may form a 5-, 6- or 7- membered ring;

Y' is halogen;

Y'' is hydrogen;

Z' and Z'' are each independently selected from the group consisting of hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₃₋₈ cycloalkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₁₋₈ alkoxy, =O, -CN, -NO₂, -OH, -OR⁷, -OC(O)R⁷, -CO₂R⁷, -C(O)R⁷, -CONR⁷R⁸, -OC(O)NR⁷R⁸, -NR⁷C(O)R⁸, -NR⁷C(O)NR⁸R⁹, -NR⁷R⁸, -NR⁷CO₂R⁸, -SR⁷, -SOR⁷, -SO₂R⁷, -SO₂NR⁷R⁸, -NR⁷SO₂R⁸, unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- or 6-membered heteroaryl and unsubstituted or substituted 3- to 7-membered heterocyclyl; and

where R⁷, R⁸ and R⁹ are each independently hydrogen, unsubstituted or substituted C₁₋₆ alkyl, unsubstituted or substituted C₃₋₆ cycloalkyl, unsubstituted or substituted C₂₋₆ alkenyl, unsubstituted or substituted C₂₋₆ alkynyl, unsubstituted or substituted phenyl, unsubstituted or substituted heteroaryl, unsubstituted or substituted aryl-C₁₋₄ alkyl, and unsubstituted or substituted aryloxy-C₁₋₄ alkyl; or where any two of R⁷, R⁸ and R⁹ together with the atom(s) to which they are attached, may form a 5-, 6- or 7- membered ring.

71. (New) The compound of claim 70, wherein X' and X'' are each independently selected from the group consisting of hydrogen, -C(O)R¹, -NR⁷C(O)R⁸, unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₃₋₈ cycloalkyl,

unsubstituted or substituted 6- to 10-membered aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl, with the proviso that if one of X' and X'' is hydrogen than the other is not hydrogen or unsubstituted methyl.

72. (New) The compound of claim 70, wherein Z' and Z'' are each hydrogen.

73. (New) The modulator of claim 70, where at least one of X' or X'' is situated *meta* to the sulfonamido bond.

74. (New) The modulator of claim 70, where at least one of X' or X'' is situated *ortho* to the sulfonamido bond.